and found to be in breeding condition, the ovaries being well developed but no definite eggs in process of formation.

Blue-and-white Wren, *Malurus leuconotus*. Males collected at Coolawanyah had very large gonads, suggesting breeding. Similar-sized gonads were also present in brown-plumaged birds showing no blue-and-white colour. Two parties of individuals had small, short-tailed young only a few days out of the nest.

Variegated Wren, *Malurus lamberti*. A male collected at Tambrey on May 17 had very large gonads, and in the same area a family party with recently-fledged young was seen.

Golden-backed Honeyeater, *Melithreptus laetior*, Several collected on May 20 at Coolawanyah had small gonads, but a trio collected on May 23 only a few miles away consisted of two males with very large gonads and a female with two well-developed yolk sacs indicated imminent breeding.

(In contrast to other meliphagid species, specimens of the Brown Honeyeater, *Lichmera indistincta*, and White-plumed Honeyeater, *Mcliphaga penicillata*, were also found to have weli-developed gonads; and frequent song was heard from both species, suggesting that breeding might occur, but no further evidence was obtained.)

Australian Pipit, Anthus novaeseelandiae. Specimens collected had well-developed gonads. Towards the end of the period at Coolawanyah a pair were found with a nest containing half-grown young and it was estimated that they would have been about half-way through incubation when we arrived. During late May at Karratha different pairs were seen carrying food to young, although the latter may have been out of the nest by them.

Singing Bushlark, *Mirafra javanica*. Birds were singing over open areas where grass had recently grown at Coolawanyah. The gonads of those collected were large and a female collected on May 14 had a fully-formed yolk-sac. At Karratha on May 30 a juvenile with most of the wing and tail feathers fully grown was collected. Other, recently fledged, juveniles were seen on the grass flats in the same area.

Star Finch, *Bathilda ruficauda*. At Karratha these were present in pairs and small parties in the rushy growth along the creeks. Of a few collected on May 28 the male showed large gonads and one female had a fully-developed yolk-sac, indicating that breeding was occurring. Painted Finches, *Emblema picta*, present in the same area showed no evidence of breeding activity and had small gonads, as did those collected at Coolawanyah.

Zebra Finch, *Taeniopygia custanotis*. Birds at Coolawanyah had young that were still partially dependent on the parents. There was considerable song from males in small parties that came to drink, but no actual evidence of nesting.

## WHITE-HEADED STILT NESTING NEAR PERTH

By B. HUTCHISON, Woodlands.

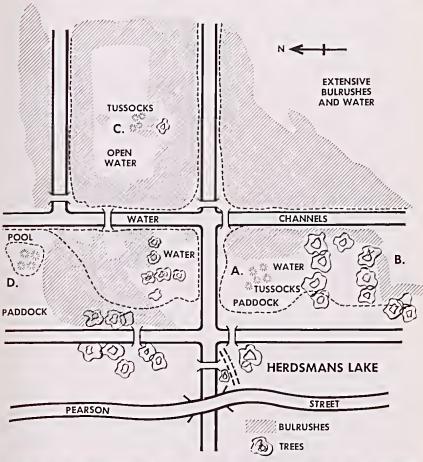
During my activities in a bird-banding survey at Herdsman's Lake I have often recorded parties of White-headed Stilts (Himantopus himantopus) from August to November. In 1967 a party of six birds were noted on a flooded paddock (Location A on map). These birds were first seen on August 8 and persisted in the locality.

On September 23 and the week-end previously I was surprised to find the birds aggressive, flying at intruders and using the

broken wing ruse which indicated a nest or nests in the vicinity. But despite a search with powerful glasses no nest or nest site could be found. However on September 30 one bird remained sitting on what appeared to be a nest. Closer investigation showed a nest with one egg.

The nest was built on a hump of wild couch. It was quite substantial, lined with fresh and dead grass stems. The egg closely resembled a small Silver Gull's egg, but was pointed at one end. The colour was olive-green with dark purple-brown splotches and lines, the shell having a slight gloss. I wrongly assumed the egg was the first of a batch; it was however the last.

The following week-end, October 7-8, Dr. D. L. Serventy accompanied my brother (D. E. Hutchison) and myself to the site. However the nest contained no eggs at all. Birds were extremely aggressive, indicating young or other nests in the vicinity. Despite a constant watch birds did not settle and it was assumed young birds were hiding in bulrushes at the western end of the paddock. After Dr. Serventy had left a Kookaburra swooped into the paddock and carried off a young stilt in its beak. The



Portion of Herdsman's Lake where the Stilts nested; the symbols are explained in the text.

Kookaburra was immediately attacked by all the stilts, causing it to drop the young bird. A close search of this area failed to find the young stilt and it was assumed unhurt.

I was able to pay a brief visit to the locality at daybreak the following day and was fortunate to see three young birds in clear light. They were observed through x 10 glasses and could be clearly seen. They were olive-green, with darker splotches above, with white neck collar, breast and abdomen. Their legs appeared to be unusually long, as did their beaks. When the parent bird became aware of me the young disappeared into long grass.

A further visit on October 15 showed the adult birds and young had left the area. However the young, five in all, were located at B two weeks later. They had grown rapidly and were assuming juvenile plumage. A Whistling Eagle in the area was attacked by the adult stilts and was successfully put to flight.

A second nest site was located at point C. This nest contained four eggs and was successfully photographed. Several pairs were in the vicinity and all became aggressive, or displayed the broken wing reaction.

Further reaction by two pairs of stilts at point D indicated nests in this area, though they were never found. The assumption could be that at least 8 pairs nested in various localities on the lake. Each site was similar—being flooded tussocks of grass, with humps isolated by water. In all cases of nests seen (two in use and one abandoned) they were built on tussocks isolated by water.

The birds' reaction to intruders was four-phased. The first was an aggressive swooping at the intruder, the second a fluttering of wings, with legs dangling as if broken, with the bird uttering a tremulous cry. The third was an actual broken wing display on the ground, and the fourth and most interesting was the bird's apparent settling on a nest, with the ruse being enhanced by the bird dragging grass towards itself.

Apparently this is the first record of stilts nesting on the Swan Coastal Plain. Undoubtedly the unusually heavy rain during mid-winter, and the extensive flooding of surrounding paddocks, created suitable nesting sites for the stilts. Further observations may show that the area could well become a regular nest site.

Nesting during 1968 was not definitely proved. However birds were seen at B by Mr. Tom Spence who thought that at least one pair was nesting. I made further observations but could find no concrete evidence of this. However very young birds and adults were seen frequently.

## NOTES ON THE FEEDING HABITS OF SOME WESTERN AUSTRALIAN BIRDS

By C. F. H. JENKINS, M.A.

The following notes on the feeding habits of some Western Australian birds have been prepared from a number of random stomach analyses and some careful observations through high-powered binoculars (x 16). The results indicate that several birds have a much more varied diet than is generally realised and that much still remains to be learned about the feeding behaviour of even our commonest species.

Unless indicated otherwise all specimens were collected by the author.